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10/669,070

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Mark David Murawski

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EXAMINER

SAUNDERS JR, JOSEPH

ART UNIT

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2615

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/669,070

Applicant(s)

MURAWSKI ET AL.

Examiner

Joseph Saunders

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 May 2007.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-63 and 66 is/are pending in the application.
- 4a) Of the above claim(s) 64 and 65 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-63 and 66 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 September 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 2-27-04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

1. This office action is in response to the response to restriction filed May 7, 2007.

Claims 1 – 63 and 66 directed to Species I and elected without traverse are currently pending and considered below. Claims 64 and 65 have been withdrawn from consideration.

Drawings

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: 12, 17, 19 of Figure 1, and 72 and 83 of Figure 2. Reference characters 80 and 82 are used in both Figure 2 and Figure 3 to designate two different components of the system, as a result reference characters 80 and 82 of Figure 2 should be changed and an appropriate description should be provided in the specification. Also in Figures 2 and 4 there are two occurrences of reference character 54, the occurrence designating the PC card slot is correct, the other occurrence designating the data bus should be corrected to 52. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New

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Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

3. The disclosure is objected to because of the following informalities: On page 20 line 13 the two occurrences of "central computer 86" should be corrected to "central computer 90". The same problem occurs on page 27 lines 4 – 5.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1, 3, 5, 6, 8, 10, 12, 14, 19, 23, 25, 28, 40, 41, 45, 46, 48, 50, 52, 56, 57, 59, and 62 are rejected under 35 U.S.C. 102(b) as being anticipated by Helms (5,561,710), hereinafter Helms.

Claim 1: Helms discloses an apparatus comprising: a terminal (central station); a peripheral device (interactive voice communication terminal 10) for coupling to the terminal (central station) and having at least one line for directing audio signals to the

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terminal (phone line); the peripheral device configured to forward a characterizing signal (DTMF signal) on the at least one line to the terminal (Figure 4).

Claim 19: Helms discloses a terminal (central station) for communicating with a peripheral device (interactive voice communication terminal 10) which has a line for sending audio signals (phone line), the terminal comprising: circuitry (DTMF decoder) operable for reading a characterizing signal (DTMF signal) from the audio signal line of a peripheral device (Figure 4).

Claim 40: Helms discloses a method for interfacing between a peripheral device (interactive voice communication terminal 10) and a terminal (central station) comprising: with a peripheral device having at least one line for directing audio signals (phone line) to the terminal, forwarding a characterizing signal (DTMF signal) to the terminal on the at least one line (Figure 4).

Claim 56: Helms discloses a method for interfacing between a peripheral device (interactive voice communication terminal 10) and a terminal (central station) comprising: with a terminal, reading (DTMF decoder) a characterizing signal (DTMF signal) from the audio signal line of a peripheral device (Figure 4).

Claim 3: Helms discloses the apparatus of claim 1 wherein the characterizing signal (DTMF signal) is associated with at least one of use ("communicating with an interactive

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voice service system through a telephone system," Column 2 Lines 6 – 9), user, use group and location.

Claims 28, 41, and 57: Claims 28, 41, and 57 are substantially similar in scope to claim 3 and therefore are rejected for the same reasons.

Claim 5: Helms discloses the apparatus of claim 1 wherein the characterizing signal is an audio signal ("audio tones in the form of DTMF tones," Column 6 Lines 117 – 18).

Claim 45: Claim 45 is substantially similar in scope to claim 5 and therefore is rejected for the same reasons.

Claim 6: Helms discloses the apparatus of claim 1 wherein the terminal includes frequency analysis circuitry for processing the characterizing signal (DTMF decoder 52, Figure 4).

Claims 23 and 46: Claims 23 and 46 are substantially similar in scope to claim 6 and therefore are rejected for the same reasons.

Claim 8: Helms discloses the apparatus of claim 1 wherein the characterizing signal is one of a DTMF tone (DTMF signal, Abstract) and a PWM stream.

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Claims 25, 48, and 59: Claims 25, 48, and 59 are substantially similar in scope to claim 8 and therefore are rejected for the same reasons.

Claim 10: Helms discloses the apparatus of claim 1 wherein the peripheral device includes a tone generator (DTMF generator 36, Figure 3) for generating audio tones to form the characterizing signal.

Claims 50 and 62: Claims 50 and 62 are substantially similar in scope to claim 10 and therefore are rejected for the same reasons.

Claim 12: Helms discloses the apparatus of claim 1 wherein the peripheral device has an input (key), the peripheral device forwarding the characterizing signal to the terminal when the input is engaged ("a key is depressed and the controller 34 then determines which sequence of DTMF tones need to be generated by the DTMF generator 36," Column 4 Lines 44 – 47).

Claim 52: Claim 52 is substantially similar in scope to claim 12 and therefore is rejected for the same reasons.

Claim 14: Helms discloses the apparatus of claim 1 wherein the peripheral device includes circuitry for generating the characterizing signal (DTMF generator 36), the circuitry being powered by a battery source (battery 44) in the peripheral device (Figure

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3).

6. Claims 63 and 66 are rejected under 35 U.S.C. 102(b) as being anticipated by Hallikainen et al. (5,797,102), hereinafter Hallikainen.

Claim 63: Hallikainen discloses a terminal (mobile phone) for communicating with a computer (it is inherent that in order to establish communication between two users a mobile phone communicates with another computer), comprising: circuitry for controlling the operation of the terminal (MCU), the circuitry configured to read a characterizing parameter (identification code, Column 3 Lines 23 – 41) from a peripheral device (auxiliary device) coupled to the terminal; the circuitry further configured to make the terminal operate according to at least one operational parameter (amplification parameter) associated with the characterizing parameter of the peripheral device (Column 1 Lines 45 – 50).

Claim 66: Hallikainen discloses the terminal of claim 63 and further discloses wherein the characterizing parameter is associated with at least one of a use (identification of the auxiliary device, Column 1 Lines 43 – 50 and Column 3 Lines 23 – 41), user, user group and location.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 2, 20, and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Helms in view of Roy et al. (US 2003/0142814 A1), hereinafter Roy.

Claim 2: Helms discloses the apparatus of claim 1 but *does not disclose* wherein the terminal is configured for associating an operational parameter for the terminal with the characterizing signal of the peripheral device. Helms does disclose that the terminal (central station) is configured for data entry services through communication with the characterizing signal (DTMF signal) of the peripheral device (Column 5 Lines 25 – 46). Roy discloses a similar system for using DTMF signals for communicating with a processor (Paragraph 28). Roy discloses that the terminal (processor) is configured for associating an operational parameter (sound level control) for the terminal with the characterizing signal (DTMF signal) of the peripheral device. Therefore it would have been obvious to one of ordinary skill in the art to incorporate the ability of associating operational parameters of a terminal with a characterizing signal as disclosed by Roy in the system of Helms since doing so allows for remote control of operational parameters of the terminal (Paragraph 31).

Claims 20 and 42: Claims 20 and 42 are substantially similar in scope to claim 2 and therefore are rejected for the same reasons.

9. Claims 7, 9, 24, 26, 47, 49, and 56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Helms in view of Fujisaki (4,853,953), hereinafter Fujisaki.

Claims 7 and 9: Helms discloses the apparatus of claim 6 and further discloses wherein the peripheral device or communication terminal 82 may incorporate components into a handset (Column 6 Lines 62 – 65) and the peripheral device also uses a microphone line or phone line to forward the characterizing signal. Helms *does not disclose* wherein the frequency analysis circuitry includes speech recognition circuitry and *does not* disclose the device taking the form of a headset. Fujisaki discloses a voice controlled dialer in which speech is the characterizing signal to be transferred over a microphone line and uses a speech recognizer 2 to translate speech into multifrequency tone control signals (Column 2 Lines 18 – 32). Therefore it would have been obvious to one of ordinary skill in the art to include speech recognition capabilities as disclosed by Fujisaki in the system of Helms, since Helms terminal is already capable of decoding DTMF signals, having speech recognition circuitry that can translate speech into DTMF control signals before being decoded in the terminal would allow for hands free operation of the system by the user. Since the system would then offer hands free operation, the office takes Official Notice that it would have been

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obvious to one of ordinary skill in the art to design the handset as disclosed by the system of Helms and Fujisaki to be worn on the head in the form of a headset since headset were well known in the art at the time of as an alternate input device to a handset thereby allowing hands-free operation.

Claims 24, 26, 47, 49, and 56: Claims 24, 26, 47, 49, and 56 are substantially similar in scope to claim 7 and 9 and therefore are rejected for the same reasons.

10. Claims 1, 4, 11, 13, 15 – 22, 27, 29 – 40, 42 – 44, 51, 53 – 56, 58, 60, and 61 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hallikainen in view of Helms.

Claims 1 and 4: Hallikainen discloses an apparatus comprising: a terminal (mobile phone); a peripheral device (auxiliary device) for coupling to the terminal (mobile phone) and having at least one line for directing audio signals to the terminal (audio line, Figure 4); the peripheral device configured to forward a characterizing signal; wherein the characterizing signal is reflective of an ID of the peripheral device (identification code, Column 3 Lines 23 – 41). Hallikainen *does not disclose* wherein the identification data is forwarded on the audio line to the terminal. Helms discloses a method of passing information over an audio line from a handset to a processor for the purposes of data entry using DTMF signals (Column 5 Lines 25 – 46). It would have been obvious to one of ordinary skill in the art at the time of the invention to use DTMF signals as disclosed by Helms to communicate between a peripheral and a processor in the system

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disclosed by Hallikainen, thereby reducing the necessity of an additional data line as disclosed in Figure 4 of Hallikainen, since the information sent over the data line can be sent over the audio line in the technique disclosed by Helms.

Claims 19 – 22: Hallikainen discloses a terminal (mobile phone) for communicating with a peripheral device (auxiliary device) which has a line for sending audio signals (audio line, Figure 4) wherein the terminal comprising: circuitry (MCU) operable for reading a characterizing signal; circuitry operable for configuring the terminal to operate according to at least one operational parameter (amplification parameter) associated with the characterizing signal; wherein the operational parameter is stored in memory (data for each auxiliary device is stored in memory) which is accessed according to the characterizing signal (identification data supplied by interface data line) (Column 2 Lines 1 – 46); wherein the characterizing signal is reflective of an ID of the peripheral device (identification code, Column 3 Lines 23 – 41). Hallikainen *does not disclose* wherein the identification data is forwarded on the audio line to the terminal. Helms discloses a method of passing information over an audio line from a handset to a processor for the purposes of data entry using DTMF signals (Column 5 Lines 25 – 46). It would have been obvious to one of ordinary skill in the art at the time of the invention to use DTMF signals as disclosed by Helms to communicate between a peripheral and a processor in the system disclosed by Hallikainen, thereby reducing the necessity of an additional data line as disclosed in Figure 4 of Hallikainen, since the information sent over the data line can be sent over the audio line in the technique disclosed by Helms.

Claims 29 and 30: Hallikainen discloses a peripheral device (auxiliary device) for use with a terminal (mobile phone) comprising: circuitry (processor) and at least one line (audio line, Figure 4) for directing audio signals to the terminal (audio line, Figure 4); the circuitry configured to forward a characterizing signal (identification code, Column 3 Lines 23 – 41) for configuring the operation of the terminal (amplification parameters, Figure 1). Hallikainen *does not disclose* wherein the identification data is forwarded on the audio line to the terminal. Helms discloses a method of passing information over an audio line from a handset to a processor for the purposes of data entry using DTMF signals (Column 5 Lines 25 – 46). It would have been obvious to one of ordinary skill in the art at the time of the invention to use DTMF signals as disclosed by Helms to communicate between a peripheral and a processor in the system disclosed by Hallikainen, thereby reducing the necessity of an additional data line as disclosed in Figure 4 of Hallikainen, since the information sent over the data line can be sent over the audio line in the technique disclosed by Helms.

Claims 40, 42, and 44: Hallikainen discloses a method for interfacing between a peripheral device (auxiliary device) and a terminal (mobile phone) comprising: with a peripheral device having at least one line for directing audio signals to the terminal (audio line, Figure 4), forwarding a characterizing signal to the terminal (identification code, Column 3 Lines 23 – 41); wherein the terminal is configured to associate an operational parameter (amplification parameter) of the terminal with the characterizing

signal (identification code). Hallikainen *does not disclose* wherein the identification data is forwarded on the audio line to the terminal. Helms discloses a method of passing information over an audio line from a handset to a processor for the purposes of data entry using DTMF signals (Column 5 Lines 25 – 46). It would have been obvious to one of ordinary skill in the art at the time of the invention to use DTMF signals as disclosed by Helms to communicate between a peripheral and a processor in the system disclosed by Hallikainen, thereby reducing the necessity of an additional data line as disclosed in Figure 4 of Hallikainen, since the information sent over the data line can be sent over the audio line in the technique disclosed by Helms.

Claim 56: Hallikainen discloses a method for interfacing between a peripheral device (auxiliary device) and a terminal (mobile phone) comprising: with a terminal, reading a characterizing signal (identification code, Column 3 Lines 23 – 41) from the peripheral device. Hallikainen *does not disclose* wherein the identification data is forwarded on the audio line to the terminal. Helms discloses a method of passing information over an audio line from a handset to a processor for the purposes of data entry using DTMF signals (Column 5 Lines 25 – 46). It would have been obvious to one of ordinary skill in the art at the time of the invention to use DTMF signals as disclosed by Helms to communicate between a peripheral and a processor in the system disclosed by Hallikainen, thereby reducing the necessity of an additional data line as disclosed in Figure 4 of Hallikainen, since the information sent over the data line can be sent over the audio line in the technique disclosed by Helms.

Claim 11: Hallikainen and Helms disclose the apparatus of claim 1 and Hallikainen further discloses wherein the peripheral device is configured to automatically forward the characterizing signal to the terminal when it is coupled to the terminal ("the auxiliary device can transmit the identification message automatically ... after connection", Column 5 Lines 25 – 46).

Claims 27, 35, 51, and 60: Claims 27, 35, 51, and 60 are substantially similar in scope to claim 11 and therefore is rejected for the same reasons.

Claim 13: Hallikainen and Helms disclose the apparatus of claim 1 wherein the peripheral device includes circuitry for generating (Helms, DTMF generator 36) the characterizing signal. Hallikainen and Helms *do not disclose* the circuitry being powered by the terminal. Helms does disclose that "the entire system is powered by a battery 44 or some type of power source," Column 4 Lines 24 – 25. The office takes official notice that in the case where a device is coupled to a telephone network as in Figure 7A of Helms by a physical line that the telephone, communication terminal 82, or any other circuitry connected to the terminal or central station may receive power over the line. Therefore give that Helms discloses using other types of power sources it would have been obvious to one of ordinary skill in the art at the time of the invention to obtain power over the physical line from the central station therefore eliminating the need for a battery.

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Claim 37: Claim 37 is substantially similar in scope to claim 13 and therefore is rejected for the same reasons.

Claim 15: Hallikainen and Helms disclose the apparatus of claim 1 and Hallikainen further discloses wherein operational parameters (amplification parameters, Figure 1) for the terminal are stored in memory (data for each auxiliary device is stored in memory), the terminal operable for accessing the memory using the characterizing signal (identification data supplied by interface data line) (Column 2 Lines 1 – 46).

Claim 53: Claim 53 is substantially similar in scope to claim 15 and therefore is rejected for the same reasons.

Claim 16: Hallikainen and Helms disclose the apparatus of claim 1 and Hallikainen further discloses wherein the operational parameters are in a menu (memory containing auxiliary device and amplification parameters, Figure 1), the terminal operable for accessing the menu based upon the characterizing parameter (identification code, Column 3 Lines 23 – 41).

Claim 54: Claim 54 is substantially similar to claim 16 and therefore is rejected for the same reasons.

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Claim 17: Hallikainen and Helms disclose the apparatus of claim 1 and Hallikainen further discloses wherein the operational parameters include at least one from the group of voice templates, volume preferences (amplification parameters, Figure 1), and text-to-speech preferences.

Claim 55: Claim 55 is substantially similar in scope to claim 17 and therefore is rejected for the same reasons.

Claim 18: Hallikainen and Helms disclose the apparatus of claim 1 and Hallikainen further discloses wherein said terminal is configured for coupling with multiple different peripheral devices (auxiliary devices 1 through N, Figure 1), the terminal being configurable to operate with multiple operational parameters (amplification parameters for reception and transmission, Figure 1) associated with the peripheral device characterizing signals of the peripheral devices.

Claims 43 and 58: Claims 43 and 58 are substantially similar in scope to claim 18 and therefore is rejected for the same reasons.

Claim 31: Hallikainen and Helms disclose the peripheral device of claim 29 and Helms further discloses wherein the characterizing signal is an audio signal ("audio tones in the form of DTMF tones," Column 6 Lines 117 – 18).

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Claim 32: Hallikainen and Helms disclose the peripheral device of claim 29 and Helms further discloses wherein the characterizing signal is one of a DTMF tone (DTMF signal, Abstract) and a PWM stream.

Claim 33: Hallikainen and Helms disclose the peripheral device of claim 29. Hallikainen further discloses wherein the peripheral device is an earpiece, hand free unit, or hand-held telephone and Helms further teaches wherein the peripheral device uses a microphone line or phone line to forward the characterizing signal.

Claim 61: Claim 61 is substantially similar in scope to claim 33 and therefore is rejected for the same reasons.

Claim 34: Hallikainen and Helms disclose the peripheral device of claim 29 and Helms further discloses wherein the peripheral device includes a tone generator (DTMF generator 36, Figure 3) for generating audio tones to form the characterizing signal.

Claim 36: Hallikainen and Helms disclose the peripheral device of claim 29 and Helms further discloses wherein the peripheral device has an input (key), the peripheral device forwarding the characterizing signal to the terminal when the input is engaged ("a key is depressed and the controller 34 then determines which sequence of DTMF tones need to be generated by the DTMF generator 36," Column 4 Lines 44 – 47).

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Claim 38: Hallikainen and Helms disclose the peripheral device of claim 29 and Helms further discloses wherein the circuitry is powered by a battery source (battery 44) in the peripheral device.

Claim 39: Hallikainen and Helms disclose the peripheral device of claim 29 and Hallikainen and Helms further disclose wherein the characterizing signal (identification code sent via DTMF signal) is associated with at least one of use (communication between a peripheral and a processor), user, user group and location.

Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph Saunders whose telephone number is (571) 270-1063. The examiner can normally be reached on Monday - Thursday, 9:00 a.m. - 4:00 p.m., EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sinh Tran can be reached on (571) 272-7564. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



JS
June 27, 2007



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